

# **Persnickety editor, founding father, mentor and friend: The legacy of Fred Mumpton**

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I first met Fred Mumpton during my second year of Ph.D. doctoral research at Texas A&M University in 1982. I had just started a research program to survey and characterize zeolites in soils of south Texas. Fred was invited by my major professor, Dr. Joe Dixon, to stop by the university and check out some of the local Texas zeolites, including clinoptilolite in the nearby Catahoula Formation. I had read many of the articles and books Fred had written and edited while I was preparing for my Ph.D. research, so needless to say, as a student, I was in awe and thrilled to meet the great Fred Mumpton. That visit was the start of a long and close relationship with Fred. For the next 20+ years we had many interactions. It was an honor and privilege to have had the opportunity to interact with Fred. To us all, Fred wore many different hats. But to me, Fred was the persnickety editor, founding father, mentor and most importantly, friend.

## **Persnickety Editor**

Anyone would tell you that one of Fred's outstanding talents was his ability to edit a paper into a sound scientific piece of work. I found this out very early in my career when Fred and I wrote a zeolite chapter for a soil mineralogy text book (Ming and Mumpton, 1989). Fred worked with me patiently to get the chapter into top notch shape (a mandatory requirement for Fred). Over the next few years we edited a book together (Ming and Mumpton, 1995). It was a great learning experience as Fred taught me the "tricks of the trade." I use to this day his "recipe" for a sound scientific paper (Mumpton, 1990). I think that if Fred could talk to me this minute, he would remind me that it would be a good idea to refresh everyone's memory on the "recipe" for writing a sound science paper. So, with Fred looking over my shoulder somewhere up there, here is that "recipe." The format for the "recipe" consists of the following parts: 1) Title; 2) Authorship, 3) Abstract, 4) Introduction, 5) Experimental (or Methods & Materials), 6) Results, 7) Discussion, 8) Conclusions (or Summary & Conclusions), 9) Acknowledgements, and 10) References Cited. I cannot go into the details for each of these sections, but I encourage readers to read Fred's comments. I will however state that the abstract may be the most important part of the paper because this may be the only section read. As Fred states "the abstract should be a fact-filled condensation of the entire paper." The abstract should convey the rationale for undertaking the study, brief statement about the methods, the important findings (including specific data, and anyone that has had an article edited by Fred will attest to this), and the pertinent interpretations (conclusions) of those findings. Although Fred may have been a persnickety editor, his overarching goal was to help a writer clearly express their scientific findings to their colleagues.

## **Founding Father**

Perhaps Fred will be most remembered for his love of natural zeolites and his desire to bring scientists together from around the world to discuss his passion. For nearly 30 years, Fred led the International Committee on Natural Zeolites (ICNZ). His foresight to bring scientists and technologists together to discuss natural zeolites at that first conference in Tucson, Arizona, in 1976 has led to seven international conferences (including this 7<sup>th</sup> conference in Socorro). I

helped Fred organize the 4<sup>th</sup> International Conference on Natural Zeolites held in Boise, Idaho, during June of 1993. It was a lot of hard work to organize that meeting and I marveled at Fred's enthusiasm and energy in leading the effort to organize that conference. He would remind me from time to time (when I wanted to "throw in the towel") why such conferences were important and that all of this hard work would pay off. Fred would tell me that the conference would provide the opportunity to highlight the latest information on the occurrence, structure, physical and chemical properties, and applications of natural zeolites, but most importantly, it will set the stage from which future researchers will launch even more intriguing investigations.

Fred stepped down as chair of ICNZ after the 5<sup>th</sup> international meeting was held on Ischia in 1997. I tried to persuade Fred not to step down, but as he put it "it's time." I took over Fred's position as chair of ICNZ. I knew that it would be impossible to fill Fred's shoes, but what struck me the most was the amount of time Fred spent on ICNZ. I was not an able substitute for Fred Mumpton; he devoted his life to the advancement of the science on natural zeolites. Fred was truly a pioneer in developing the natural zeolite discipline and the founding father of our organization.

### Mentor and Friend

Fred was not only my mentor, but my dear friend. He was always willing to help me out with a project or a problem. Back in 1982, he started out as my mentor. One of the first items that he taught me was how to correctly pronounce the names of natural zeolites. He told me that if I was going to get "into" the natural zeolite business that I better learn how to pronounce the names correctly. I wrote down those pronunciations and they are presented in Table 1.

I worked daily with Fred after I finished my Ph.D. We worked together on writing papers, organizing meetings, and editing books. I felt at times that I was in way over my head, but Fred was always patient and willing to provide guidance to pull me through a tough situation. It was during this time that Fred and I became good friends. Ardeth (i.e., Fred's better half) was always at his side and I perhaps spent as much time on the phone talking to Ardeth as I did Fred. They were both my mentors and inspired me to continue my research in the arena of natural zeolites. Their support, guidance, and friendship helped me get to where I am today in the scientific world. Fred, you are dearly missed, but your legacy will live on because you took the time to mentor and build friendships with so many of us. Thanks Fred for your dedication, leadership, and most importantly, your friendship!

### References

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- Ming, D.W., and F.A. Mumpton (eds.) (1995) *Natural Zeolites '93: Occurrence, Properties, Use*. International Committee on Natural Zeolites, Brockport, NY, 622 pp.
- Mumpton, F.A. (1990) The universal recipe or how to get your manuscript accepted by persnickety editors. *Clays & Clay Miner.*, **38**, 631-636.

**Table 1.** Mumpton's pronunciation of common zeolites as translated by D.W. Ming.

Zeolite	Mumpton's Pronunciation
analcime	•n •l s•m

chabazite	k•b à s•t
clinoptilolit	kl• n• t•l • l•t
e	
erionite	•r • • n•t
heulandite	h• l•n d•t

mordenite  
phillipsite

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mô•r d• n•t  
f•l l•p s•t



**Figure 1.** Fred Mumpton towering over an outcrop of clinoptilolite near Buckhorn, New Mexico during ZeoTrip '87.